

### National Weather Service Reno, NV SkyWarn Weather Spotter's



#### **Hazards to Report**

#### Call us when you observe:

- Tornado— All tornadoes, include their duration and direction of movement.
- Funnel Cloud— All funnel clouds, watch for rotation. Include their duration and direction of movement.
- Wall Cloud—All wall clouds, include their duration and direction of movement.
- Hail— I/2 inch in diameter and larger. Hail needs to be one inch (quarter-sized in diameter) to be considered severe. Always report the largest hailstone you have observed and describe in terms of common objects such as pennies, quarters, golf balls, softballs, etc. The size of the hailstone will always be described in terms of the diameter. Also report hail that is accumulating and covering the ground.
- Near Continuous Cloud to Ground Lightning
- Winds— All winds greater than 45 MPH
- Heavy Rain—Falling at a rate of I" per hour or greater (1/2" in 30 minutes), or more than I" per day in winter. Rapidly falling heavy rain may be a precursor to flash flooding.
- Freezing Rain/Drizzle—Any measurable freezing rain. This is one of the most dangerous winter weather hazards!
- Heavy snow—I" per hour or greater, or storm total 4" or more, or snow causing road closures. Any snowfall in Western Nevada Valleys.
- Flooding— Any water flowing where it normally doesn't or rivers flowing above their banks.
- Flash Flooding—Report rapid rises in creeks and streams. Flash flooding occurs very quickly, and generally is of short duration ( < 3 hours)
- Low Visibility— Visibility less than 1/2 mile for any reason (fog, haze, blowing dust, blowing snow, etc.)
- Any and All Weather Related Damage, Death, or Injury— If weather causes any damage, death, or injury.

When it is safe, please phone in your reports to help save a life!

#### National Weather Service Reno

#### **Products and Services**

#### **Convective Weather Products**

**Hazardous Weather Outlook**: A product that outlines the weather threat over the next 7 days

**Severe Thunderstorm Watch:** Conditions are favorable for severe thunderstorm development within the next 1 to 6 hours

Severe Thunderstorm Warning: Thunderstorm winds >= 58 mph and/or hail >= one inch is occurring or imminent

**Tornado Watch:** Conditions are favorable for tornadoes within the next 2 to 6 hours

Tornado Warning: A tornado is occurring or imminent

**Severe Weather Statement:** Provides update to current severe thunderstorm and tornado warnings

#### Flooding Products

Flash Floods: Short duration events (<= 6 hrs) caused by torrential rain, dam breaks, and/or ice jams
River Flooding: Long duration events (>6 hrs) caused by spring run-off and/or slowly rising rivers
Hydrologic Outlook: Discusses possibility of flooding beyond 36 hours, water supply, or drought conditions

Flash Flood Watch: Flash flooding is possible within the next 36 hours

Flood Watch: Potential for long duration/main stem river flooding within the next 36 hours

Flash Flood Warning: Flash flooding is occurring or imminent River flooding is occurring or imminent

**Urban/Small Stream** Short duration (<=6 hrs) localized flooding in city areas is occurring or imminent

Flood Advisory: (usually not life threatening)

Flood Statement: Provides updates and information about flood/flash flood watches, warnings, and advisories

**River Statement:** Provides additional information about river stages and forecasts

#### **Winter Weather Products**

Winter Storm Watch: Potential exists for a blizzard, heavy snowfall, ice storm, and/or strong winds within the next 72 hours

Blizzard Warning: Sustained wind >= 35 mph and visibility <= 1/4 mile lasting at least 3 hours

Winter Storm Warning: Valleys: 4" of snow in 12 hours or 6" of snow in 24 hours.

Mountains:

Sierra: 5000-7000 ft: 8 inches in 12 hours or 12 inches in 24 hours

Above 7000 ft: 12 inches in 12 hours or 18 inches in 24 hours

**Nevada Mountain Ranges:** 5000-7000 ft: 6 inches in 12 hours or 10 inches in 24 hours

Above 7000 ft: 8 inches in 12 hours or 12 inches in 24 hours

Freezing Rain/Drizzle Advisory: Light freezing rain or drizzle (with little accumulation) is occurring or imminent

Winter Weather Advisory: Valleys: 2" of snow in 12 hours or 3" of snow in 24 hours.

Mountains:

**Sierra:** 5000-7000 ft: 4 inches in 12 hours or 6 inches in 24 hours

Above 7000 ft: 6 inches in 12 hours or 9 inches in 24 hours

Nevada Mountain Ranges: 5000-7000 ft: 3 inches in 12 hours or 5 inches in 24 hours

Above 7000 ft: 4 inches in 12 hours or 6 inches in 24 hours

Avalanche Bulletin: Issued when the Avalanche Centers determine the avalanche risk is high or extreme

Avalanche Guidance: Issued to help Avalanche Center and Ski Patrollers make decisions about the snow pack

#### **Non-Precipitation Products**

High Wind Watch: Potential for sustained winds >= 40 mph (lasting at least 1 hour) and/or gusts >=58 mph (for any length of

time), not associated with thunderstorms.

High Wind Warning: Sustained wind >=40 mph lasting at least 1 hour, or gusts >=58 mph anytime. Above 7000 feet: Sustained

winds >=50 mph lasting at least 1 hour, or gusts >=75 mph anytime.

**Dust Storm Warning:** Sustained Wind >=35 mph and visibility <= 1/4 mile lasting at least 1 hour

Wind Advisory: Sustained wind 30-39 mph or gusts 45-57 mph (not associated with T-storms) covering a significant

portion of at least one zone, lasting several hours. Not issued above 7000 feet.

Wind Chill Warning: Wind chill Temp <=-20 degrees and wind >=10 mph lasting at least an hour

Blowing Dust Advisory: Wind >= 30 mph and visibility <= 1/2 mile

Dense Fog Advisory: Widespread visibilities <=1/4 mile due to dense fog are occurring or imminent

Volcanic Ash Advisory: Issued whenever volcanic ash fallout occurs or is imminent

775-673-8100 775-673-8130 weather.gov/reno
Administrative Line Phone Recording Visit our website for the latest information!

#### National Weather Service Reno

#### **Severe Weather Products and Services (Continued)**

#### **Fire Weather Products**

Fire Weather Watch: Red Flag Warning:

Conditions are favorable for red flag conditions within the next 12 to 72 hours

Widely Scattered (aerial coverage must be >=15%) dry (<.10 inches of precipitation) thunderstorms. The occurrence of lightning after an extremely dry period and the forecaster believes it will start fires.

Strong winds and low humidities:

\*Lake Tahoe Basin: Wind gusts >= 30 mph for 3 hours or more and relative humidity <= 20%

\*Elsewhere in the Eastern Sierra and Western Nevada: Wind gusts >=30mph for 3 hours or more and relative humidity <=15%

**Administrative Message:** 

An informational message about an emergency

**Amber Alert:** 

Missing child reports and information

Civil Danger Warning:

A message describing imminent danger to life and property

**Civil Emergency Message:** Earthquake Report:

A message that may include call-to-action statements when danger arises A preliminary report of general information after an earthquake

Earthquake Warning:

Call-to-action statements relating to an earthquake emergency

**Evacuation Immediate:** 

Evacuation orders due to a civil emergency

Fire Warning:

Information regarding a fire emergency

Hazardous Materials Warning:

Information about an ongoing HAZMAT incident

**Local Area Emergency:** Law Enforcement Warning: **Nuclear Power Plant Warning:** Radiological Hazard Warning:

A message that may include call-to-action statements when danger arises A message that may include call-to-action statements when danger arises Call-to-action statements and information about a pending nuclear incident Call-to-action statements and information about a pending radiological incident

**Shelter In Place Warning:** Volcano Warning:

A message that may include call-to-action statements to stay in place when danger arises A message that may include call-to-action statements when a volcano becomes active

#### Other Products Not Necessarily Played on NOAA All-Hazards Radio but can be found on Website

**Public Information Statement:** 

An informational statement about weather, climate, safety, etc.

**Record Event Report:** 

A report describing broken or tied climatological records

**Short Term Forecast:** 

Monthly Temp/Precip Summary: A report of monthly precipitation and temperature for specific sites A product that describes specific and immediate weather changes anticipated during an event

**Special Weather Statement:** 

A product that highlights the potential for current as well as future active weather

Zone Forecast:

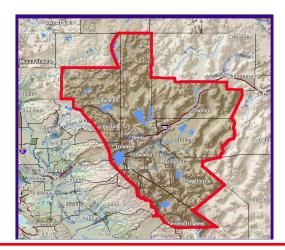
A general forecast for the Eastern Sierra and Northwestern Nevada over the next 7 days, broken by

geographic areas

Area Forecast Discussion: **Daily Climate Report:** 

This product is a discussion of current forecaster thinking created at least twice daily A report of daily climate information, including normals and records for a specific location

A product that lists storm reports during active weather **Local Storm Report:** 



Left: The Reno National Weather Service Office area of responsibility outlined in Red. It encompasses much of the Eastern Sierra and Northwest Nevada. This area may also be referred to as our CWA, which stands for County Warning Area.

# The Beaufort Wind Scale

Force	МРН	Knots	Description	Specifications
0	<1	<1	Calm	Smoke rises vertically.
1	1-3	1-3	Light Air	Direction of wind shown by smoke drift but not by wind vanes.
2	4-7	4-6	Light Breeze	Wind felt on face; Leaves rustle; Wind vanes moved by wind
3	8-12	7-10	Gentle Breeze	Leaves and small twigs in constant motion; Wind extends light flag.
4	13-18	11-16	Moderate	Raises dust, loose paper; Small branches moved.
5	19-24	17-21	Fresh	Small trees begin to sway
6	25-31	22-27	Strong	Large branches in motion; Whistling heard in telephone wires; Umbrellas used with difficulty.
7	32-38	28-33	Near Gale	Whole trees in motion; Inconvenience felt walking against the wind.
8	39-46	34-40	Gale	Twigs break off trees; Wind generally impedes progress; Mobile homes may shake.
9	47-54	41-47	Strong Gale (Severe Criteria)	Slight structural damage occurs; Mobile homes, sheds, roofs, lanais, and RV's suffer minor damage.
10	55-63	48-55	Storm	Small trees uprooted; Moderate damage occurs to mobile homes and RV's; Brick and wood frame houses receive minor structural and roof damage; damage to TV antennas; Some signs blown down.
11	64-73	56-63	Violent Storm	Moderate sized trees uprooted; Large branches snapped off trees; Chimneys and road signs toppled; Significant mobile home damage; Power lines downed.
12	74-95	64-83	Hurricane Category 1	Mobile homes overturned; Large trees and branches downed; Moderate roof damage to wood and brick homes

# Measuring Hail

When Measuring Hail: Relate to common objects, measure the diameter (not the circumference), and always report the largest stone that fell.



Pea: 1/4 inch



Dime: 1/2 inch



Penny: 3/4 inch



Nickel: 7/8 inch



Quarter: 1 inch



Ping-Pong Ball: 1 1/2 inches



Golf Ball: 1 3/4 inches



Tennis Ball: 2 1/2 inches

## **Measuring Snowfall Accurately**

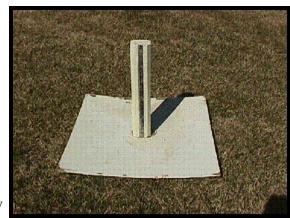
#### What you're providing:

Snowfall information during and after a storm.

#### What you'll need:

1. A snow-board (a 2x2 ft plywood board or a plastic cutting board) with a ruler extending up from the center

-If this is not possible, try to measure snowfall in the most flat, and most representative area possible. Be sure to move snow away from your measurement location to see whether the snow is resting on top of grass, so the depth of the grass



is not included in our measurement. Avoid pavement or concrete, and high traffic areas.

- 2. If using a snow-board, place the board in a flat area at least 10 feet away from tall objects.
- 3. Measure several spots on the board (to the closest 1/10th of an inch), then take an average of these measurements.
- 4. Once the measurement is taken, clean off your snow-board and place on top of the snow remaining on the ground. Try to measure once every 6 hours, and when the storm is finished.

#### Some issues that you might face...

1. **Wind** accompanies the storm and blows your snow-board, or measurement area, bare, while piling snow in other locations.

-If this occurs, try to find an area that seems representative of the snowfall. This will probably be in a location that is not terribly drifted. Also, take several measurements, then average the results. Try the best you can as in this scenario getting a very accurate result is quite difficult.

#### If you don't have a snowboard...

- 1. Measure snow in a relatively flat area
- 2. Measure in several different spots
- 3. Average your snowfall total